

INTERNATIONAL SEARCH REPORT

International Application No
PCT/IB2005/001144

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 F02D41/40 F02M57/02 F02M59/10 F02M63/02 F02M47/02

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F02D F02M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 00/55496 A (ROBERT BOSCH GMBH; MAHR, BERND; KROPP, MARTIN; MAGEL, HANS-CHRISTOPH;) 21 September 2000 (2000-09-21) cited in the application the whole document	1-13
A	US 2003/150426 A1 (TANABE KEIKI ET AL) 14 August 2003 (2003-08-14) the whole document	1, 13
A	US 2003/213470 A1 (KOHKETSU SUSUMU ET AL) 20 November 2003 (2003-11-20) the whole document	1, 13
A	WO 2004/007946 A (TOYOTA JIDOSHA KABUSHIKI KAISHA; HOTTA, YOSHIHIRO; WAKISAKA, YOSHIFUMI) 22 January 2004 (2004-01-22) -/--	1, 13

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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- *O* document referring to an oral disclosure, use, exhibition or other means
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- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
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Date of the actual completion of the international search

29 June 2005

Date of mailing of the international search report

22/07/2005

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
	<p>& US 2004/194756 A1 (HOTTA YOSHIHIRO ET AL) 7 October 2004 (2004-10-07) the whole document</p> <p>-----</p>	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB2005/001144

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 0055496	A	21-09-2000	DE 19910970 A1	28-09-2000
			WO 0055496 A1	21-09-2000
			DE 50010339 D1	23-06-2005
			EP 1078160 A1	28-02-2001
			JP 2002539372 T	19-11-2002
			US 6453875 B1	24-09-2002
US 2003150426	A1	14-08-2003	JP 2003148220 A	21-05-2003
			BR 0206893 A	10-08-2004
			DE 10253404 A1	03-07-2003
US 2003213470	A1	20-11-2003	JP 2003322050 A	14-11-2003
			CN 1455080 A	12-11-2003
			DE 10318433 A1	20-11-2003
WO 2004007946	A	22-01-2004	JP 2004044494 A	12-02-2004
			EP 1522719 A1	13-04-2005
			WO 2004007946 A1	22-01-2004
			US 2004194756 A1	07-10-2004
US 2004194756	A1	07-10-2004	JP 2004044494 A	12-02-2004
			EP 1522719 A1	13-04-2005
			WO 2004007946 A1	22-01-2004